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A LEGEND OF PORT PHILLIP.

ONE of my earliest and most cherished Australian friends was Tom Courtney—'Gentleman Tom,' as he was called, partly in derision, and partly from respect, by his less-polished neighbours. Although affable and courteous to all, there was yet a superiority of manner about Tom, which indicated gentle birth, and so jarred somewhat on the *amour propre* of men who carved their way to wealth and station even from the lowest round of Fortune's ladder.

When I first became acquainted with Courtney, he occupied a 'run' in the Dandenongs, a picturesque mountain-range about twelve miles eastward of Melbourne. He was then a bachelor; but ere long, a bright-eyed fairy presided over his hospitable hearth; for when he bravely set forth to seek his fortune at the antipodes, the chosen of his heart was left behind: long years elapsed ere success attended his labours; yet neither dreamed of breaking plighted faith. In 1836, the new colony of Port Phillip was opened up, and Courtney was quickly on the spot with his flocks. Then, when the sun of prosperity shone upon him, he wrote for her who had promised to tread the path of life with him, and she came.

She quitted home and home comforts, and friends, and parents, and brethren, all that was most dear to her, and went her way across the stormy ocean, to share his rude home in the Australian wilderness. So Tom Courtney became a happy Benedict, and a fond, proud father.

The chief troubles of the early settlers in Port Phillip were caused by the dingoes, or wild-dogs, and the aborigines. I use the past tense, because these evils are now, in a great degree, eradicated. But in the days whereof I speak, the whole country was infested by packs of wild-dogs, whose ravages often entailed considerable loss on the sheep-farmer. It is a peculiarity of this animal that, not content with killing sufficient to satisfy hunger, they will maim and destroy many more; and not unfrequently whole flocks have been dispersed by them. They are, therefore, greatly dreaded by the settler, to whom the howl of the dingo is the *avant-courier* of misfortune.

With regard to the natives, much might be said on both sides. That some of the colonists cruelly oppressed and wantonly shot them down, is unhappily too true; nor can such a result surprise those who are acquainted with the class of men who constituted much of the *matériel* of the new settlement. On the other hand, the blacks were treacherous to a degree; greedy of the white man's flour and meat, greedier of his rum. They were, moreover, very revengeful; and

their reprisals were often marked by circumstances of great atrocity. Many a victim was immolated by their spears; and many a flourishing settler utterly ruined by their destruction of his flocks and herds.

No blame could be justly attached to Courtney's conduct in this respect. He was far too humane to destroy life wantonly; indeed, so punctilious was he that the very magpies were safe from his gun, and not a parrot fell save when required for the family pie—for very savoury and delicious eating is parrot-pie, as I know full well. To the blacks, Courtney was specially kind; and I have often thought that the pertinacity wherewith sundry of the colonists subsequently sought to brand him with the foul stain of homicide, originated in this very circumstance. By them, the simple indolent aboriginal was regarded solely in the light of a nuisance, and they blamed Tom for conduct, which, in their eyes, appeared exceedingly and absurdly sentimental. But he heeded them not. 'The natives are the rightful lords of the soil,' he argued, 'and we having deprived them thereof, they surely have a claim on our hospitality.' So Tom fed, and would have clothed them, but for the knowledge that they scorned to indue their limbs in the tight apparel prescribed by European civilisation. One thing only would he not give them—ardent spirits. This was a source of grief to the natives, and no less so to their white enemies, who secretly desired the destruction of the whole native population. But Tom was firm; and neither the persuasions of his neighbours, nor the entreaties and threats of the blacks, availed aught.

Amongst the Dandenong natives was a tall, athletic black fellow, a kind of chief amongst his people, with whom strength is paramount, who had been humoured in his pretensions by the settlers dubbing him 'king,' a title which possessed all the charms of novel grandeur for the poor, untutored savage. Accordingly, King Billy—for he sunk his own more euphonious cognomen—with his leaden medal, whereon were inscribed his name and style, dependant from his brawny neck by a gaudy red ribbon, was a very great personage in his own eyes, and also in those of the tribe; and was wont to display a considerable degree of authoritative dignity in his intercourse with the whites of the district.

It happened on one occasion that King Billy, having got gloriously drunk elsewhere, staggered into Tom's home-station, and peremptorily insisted on a further supply of rum. Courtney was from home; and the overseer, who was summoned in alarm by Mrs Courtney, being desirous of getting rid of the fellow quietly, treated him to a small dose of spirit, into which a

tolerably strong emetic had previously been infused. Of course, Billy was very ill, and very angry; and he retreated, vowing vengeance on all and sundry of Courtney's household.

A few nights after this occurrence, a large number of sheep disappeared from the fold. This was the more unaccountable, inasmuch as the discordant yell of the dingo had not lately been heard in the neighbourhood. That the mischief was, however, ascribable to those nocturnal predators, Tom never for an instant doubted. The precautions usual in such cases were therefore adopted: the shepherds were armed, night-watchmen were appointed, and joints of meat impregnated with strychnine were scattered about the run.

Despite the vigilance of the watchmen, who declared that they had neither slept nor wandered from their charge, three fine wethers disappeared from one of the flocks. Here was a mystery which none could unravel. Tom and one of his overseers got on horseback, purposing to ride into the ranges, in order to discover, if possible, some clue to the enigma. As they were crossing a blind creek (*Anglice*, an occasional water-course, usually dry in the summer), they perceived some natives crouching in one of the hollows, and rode towards them, intending to make some inquiries. As they approached the blacks, the latter remained quite motionless; a circumstance which created little astonishment: they were probably asleep, or, if awake, too lazy to bestir themselves; surely the former, for they heeded not the repeated shouts of the overseer; nay, even when the horses' hoofs were beside them, they still retained their recumbent position. Tom sprang hastily from the saddle, startled by the ghastly appearance of the nearest native; he stooped to rouse him from his apparent stupor, but recoiled horror-stricken from the contact. The man was dead, stone-dead, and so were his companions, three in number, who lay around in attitudes indicative of much pain. Beside them, partially screened from observation by a pile of branches, was the entire carcass of one of the missing sheep, and by the smouldering embers of the camp-fire lay a well-gnawed leg-bone. This the overseer picked up, attentively examined, and silently handed to his master; then their eyes met, and each beheld the reflected image of his own thought; for a dread conviction forced itself upon their unwilling senses, that the blacks had partaken of the poisoned meat!

Such was indeed the fact. Other bodies—those of men, and women, and children—were subsequently discovered. In all, twenty-three had miserably perished; and thus was the mystery elucidated. The flocks had been robbed by the blacks, whose dusky forms and noiseless progress effectually baffled the vigilance of the watchmen. Retreating from the fold, they, unhappily for all parties, perceived the poisoned mutton, and cunningly secreting their live plunder for future use, at once consumed the fatal bait. The result I have already stated.

Various constructions were placed upon this untoward event. Those who best knew Mr Courtney, implicitly believed his own version of the affair. For myself, I never entertained a doubt on the subject. But the majority, misled by exaggerated reports of the quarrel with King Billy, and the subsequent robberies perpetrated by that worthy's tribe, to which the poisoned people belonged, easily believed the mischief to have been wilfully done, by way of retaliation, and openly sneered at Tom's asseverations of innocence. Some even applauded the dexterity of the feat, and not a few set my poor friend down as a consummate hypocrite, who, by a show of great kindness, had lured the natives to more sure destruction.

The whole matter was formally investigated by the local authorities. The practice of poisoning wild-dogs was general; and it was evident to the magistrates that the death of the blacks had resulted from inadvertence alone. Tom was therefore honourably acquitted; but the iron sunk deep into his soul. The cold shade of suspicion had fallen upon him, and thenceforth and for ever more, he was a sadder man.

Tom's station had hitherto been known as Glenferny—a name bestowed upon it because of the numberless arborescent ferns which grow in the gullies of the adjacent ranges. The long, graceful, feathery leaves of these beautiful trees, crowning stems twenty, and even thirty feet in height, afford a grateful shade from the scorching rays of an Australian sun, and form a pleasing and picturesque feature in the landscapes of that region. But now it seemed to Tom as if their glory had departed. The very name of Glenferny was gradually consigned to oblivion, superseded by a term which originated with the natives themselves, and ever brought to mind the seemingly atrocious and really unfortunate events which I have related. They said emphatically that the place was 'No Goon,' and as No-good the station is known even to the present day.

King Billy disappeared from the district for a while, and was generally supposed to have shared the fate of his countrymen; but, in truth, he was only hiding from what he deemed the vengeance of the man who had been his protector, and whose flocks he had nevertheless assisted to despoil. After a lapse of some months, he was seen by a shepherd, skulking about the run. Simultaneously with his reappearance, various calamities befell Tom Courtney. Now were sheep lost or destroyed, now a hut was robbed, and anon the fence of the home-paddock was mysteriously broken down, and the cattle escaped. Immunity from punishment only incited to greater offences. One morning, Tom's favourite horse, and a pony which he was training for his wife's use, were found dead, and the spear-wounds in their sides betrayed the authors of the mischief. Shortly after, the 'run' was simultaneously fired in three several places; and Tom narrowly escaped losing, not only the whole of his stock, but his very life, and the lives of his family.

This could not be borne. Hitherto, he had patiently submitted to his mishaps, hoping to tire the malice of his adversaries, and doubtlessly remembering the past. But now he obtained the assistance of some constables from Melbourne, and easily secured the person of the redoubtable King Billy. But nothing inculpatory could be extracted from the crafty black. Billy positively refused to know anything; and the evidence being too vague to justify his detention, he was set at liberty. The evening after the examination, Courtney was slowly riding homewards, when a native emerged from a clump of fragrant mimosa-bushes, and stood before him. It was King Billy. Instinctively, Courtney halted.

'White fellow very much fool!'—thus spoke the savage. 'What for him put King Billy in stone hut? (jail.) King Billy do nothing.' And he laughed a short, low, cunning laugh, which contrasted strangely with his assumed stolidity of a few hours previous. Quickly checking himself, however, he resumed his denunciation thus. 'White fellow very much rascal! What for him make Billy sick? What for him kill black fellow? White fellow very bad! Him kill black fellow's lubra; him kill piccaninny, no bigger so (lowering his hand to within two feet of the ground); him kill very lilly (little) piccaninny no bigger dat (indicating an infant). What for white fellow do so?'

Courtney was greatly agitated. Had the black lifted his spear, the white man would have fallen unresistingly.

'Billy,' he exclaimed, 'I never killed black fellow, nor black fellow's lubra. My sheep were carried off, as I supposed by the dingoes. I wished to poison them, but your people took the meat, and—and—they died!'

King Billy shook his head incredulously. 'White fellow jolly big gammon!' said he. 'Him no good. Him take black fellow's land; what for black fellow no take white fellow's meat? Eh! you sabey? (understand, from the French *savoir*.) Many moons, long way back, no white fellow here den. Den black fellow hab plenty land, plenty meat, plenty fish; now um all gone. Ah!' he continued, the remembrance of his wrongs, real and supposed, lighting up his eyes with the wild gleam of passion—'King Billy hab um plenty lubra, plenty piccaninny, plenty much good. White fellow take um all. What for dat? 'By-by, black fellow more sabey—kill white fellow—take um land—take um jumbuck (sheep)—take um lubra—take um piccaninny—take um eberyting. Den King Billy hab lilly white piccaninny lubra. What you say dat, white fellow? Ugh!' And with a loud yell, the excited savage bounded away. In vain Courtney endeavoured to pursue him; he had disappeared in the gloom, and would not be found. With a heavy heart, Tom wended his way home. The black's words boded evil, and his concluding sentences certainly sounded very like a menace. Was darling Clara, bonny golden-haired Clara, meant by the little white piccaninny? He determined to keep careful watch, and duly cautioned Mrs Courtney not to allow the child out of her sight.

Some months flew by, and nothing more was heard of the savage, who, in common with all his race, held aloof from the spot which had proved so fatal to their countrymen. Courtney began to shake off the fears that had oppressed him, and somewhat relaxed his vigilance. At last he had occasion to visit a distant part of the colony. He had heard of some fine unoccupied land in the interior; and desirous of quitting scenes that pained his sensitive mind, he resolved on a personal inspection. After an absence of only four days, he returned, to find his home in confusion. The blow he so much dreaded had fallen upon him—Clara was lost. She had been permitted to play in the garden, at the rear of the house; and when sought at eventide, had disappeared, none knew whither. No cries had been heard, nor were any traces of her flight apparent.

Courtney's suspicions fell upon King Billy and the blacks. On inquiry, he found that none of the natives had been seen on the run. But there were no wild beasts in the country capable of attacking the child, nor was it at all probable that any of the European settlers had taken her away. To make sure, however, Courtney and his men rode to all the neighbouring stations, and obtaining no tidings, he hurried into Melbourne for advice and assistance.

He seemed stunned by the calamity that had befallen him, a calamity increased by the dangerous illness of his wife, whom the loss of the child had utterly prostrated. I therefore took the affair entirely into my own hands, and after a hasty consultation with the authorities, arranged our plan of operations. By dint of bribery, we obtained the services of two skilful trackers, natives of the Werribee tribe; from the magistrates we procured the assistance of three constables; and a trifling *douceur* induced one of the most expert bushmen in the district—he was popularly known by the sobriquet of Jim the Barber—to join the party in pursuit.

Immediately the natives were brought to the garden, they commenced a close examination of the soil. For some time nothing was discovered save the frequent impressions of 'piccaninny's foot'; but on approaching an overgrown and neglected portion of the garden, immediately adjoining the fence, the

trackers, pointing thereto, exclaimed: 'Black fellow's foot dere.' Then, by pantomimic gestures, they gave us to understand that one of the natives had crouched amongst the rank vegetation. Doubtlessly, there it was that the wily savage lay in ambush until his prey—the unsuspecting child—came within reach of his remorseless grasp.

From this point the blacks followed the track with unerring sagacity. It led right into the heart of the Dandenongs. Not a trace of the fugitives could our civilised eyes detect; yet was the whole course of their flight accurately revealed to us. Each halt, and leap, and every resting-place—the water-hole whereat they had stopped to drink—the embers of the fire whereby they had paused a brief space: all were described with a vividness that was quite startling. At one place it seemed that the poor child had endeavoured to escape from her grim captor, for the track diverged in an extraordinary manner, and the guides exclaimed: 'Piccaninny run bery much; black fellow run um more!' Amongst the tangled scrub of a wild mountain glen, the trackers picked up a tiny morocco shoe. Courtney at once recognised it as having belonged to his child, and carefully deposited the precious relic in his most secure pocket.

The track became fresher as we proceeded. Crossing the Dandenongs, we came to Woori Yaloak Creek, a tributary of the Yarra-yarra river; and here we received the first check. No footprints were traceable on the further bank, and daylight failing us, we were compelled to halt for the night.

In the morning, a more rigid scrutiny was adopted. Our natives separated, and one pursued the upward, one the downward course of the stream. For about an hour we awaited the result in anxious silence. At length one of the scouts returned, without having discovered any sign of the chase, and again we strove to subdue our impatience till the other native should reappear. Another hour elapsed, yet he came not. Tired of waiting, the other went in quest of him, and quickly came running back, his features contorted with horror and affright. In a scrubby gully, not more than half a mile distant, he had found the corpse of the missing man. He was lying in a recumbent position, as though he had been slain whilst in an attitude of observation, and the fatal spear yet quivered in the death-wound. Near by were the remains of a fire. 'Black fellow sleepa dere,' said our remaining tracker; and the tantalising reflection forced itself upon us, that we had passed the night almost within hail of Courtney's child.

From this place our guide led us over stony ranges, where our progress was greatly retarded by the difficulty of identifying the track, so that at mid-day we were but little in advance of our starting-point. Soon after, we emerged into a fine open plain, dotted with clumps of silvery acacias, and bounded by a dense forest of stringy-bark and boxwood trees. As we slowly followed the tracker, I caught a glimpse of a dark object in the extreme distance, which I instinctively recognised as the object of our pursuit. He was cautiously stealing from bush to bush, apparently, however, unconscious of our presence in his vicinity.

Communicating my discovery to Courtney, we set spurs to our horses and galloped over the plain. The savage's quick ear caught the sound of our horses' hoofs, and finding himself discovered, he boldly quitted his leafy shelter, and ran, with amazing speed, towards the ranges.

Our excitement now became intense. A heap of clothing which fluttered in the black's arms as he fled, told the bereaved father that his lost child was before him, and feverish with renewed hope, he urged his horse to its utmost speed—in vain! The fleet savage gained the shelter of the forest, and there easily contrived to elude us.

To follow without a clue would have been useless. There was nothing for it, therefore, but to wait until our native guide came up, and then recommence the tedious process of tracking the course, step by step. A rock, a tree, the scrubby undergrowth itself, would have sufficed to conceal the fugitive from our unpractised eyes, though not from the sharpened senses of the Werribee scout. But the chase was soon over. In a few minutes we entered upon a little open glade, sloping down to some water-holes, around which were encamped a great number of natives. The black had regained the main body of his tribe.

When we came in sight, a great shouting and running indicated some unusual commotion in the camp. Our guide crept stealthily round the valley to observe their movements, and on returning, caused no little alarm. So far as we could comprehend him, his 'black fellow much break um piccaninny,' accompanied as it was by horrible contortions of the facial muscles, could only be interpreted in a manner which chilled our hearts within us. We were well acquainted with the cannibal propensities of the aborigines, and a terrible fear blanched every cheek and paralysed each tongue. A cry of suppressed pain burst from Courtney's lips, and the anguish depicted on his countenance was distressing to behold. Yet I could not attempt to console him—my emotion was too deep for the shallow hypocrisy of simulated hope.

Recovering from the first shock of this intelligence, he made a motion as of advancing. I had anticipated this, and restrained him. It would have been madness for a few Europeans—we were only five in number—to attack two hundred ferocious savages. If the child was yet alive, I urged, we might possibly obtain her by exciting their cupidity, or by stratagem, but could not possibly hope to do so by force. Thus I soothed him for the time at least; but not until Jim the Barber had volunteered to enter the camp, and obtain certain information. 'I know the heathens too well to be afeared of 'em,' said he; 'only you keep out of sight, and I'll make 'em believe there's half a thousand men in the scrub here.'

Accordingly, he was empowered to offer any quantity of beads, and blankets, and rum, and such other commodities as the blacks best love, for the ransom of the captive child.

After enduring suspense, as we best could, for a period of time really short, but which appeared interminable, Jim returned. To our great joy, he assured us that Clara was alive and uninjured, save that her clothes had been stripped from her, and partitioned amongst the native children, a circumstance to which, no doubt, the alarming statement of our scout referred. Having relieved our minds by this information, Jim proceeded first to damp our hopes by declaring that his attempts at negotiation had proved unsuccessful, and then to revive them by stating that some of the blacks seemed favourable to the proposed interchange.

Courtney, tremulous with desperate anxiety, refused to listen to any advice which included further delay. 'My child is yonder,' he said, 'in the hands of cruel savages. She lives now; to-morrow, perhaps'—He looked, but could not speak the horrid thought. 'Shall I stand idly by, and make no effort to save her? I go to the rescue, if I go alone. If I do not return, will you settle my affairs, and send my wife home—to England?'

'Nay,' I replied, 'if you are determined to go, we will all accompany you, although it is really only seeking our most certain destruction.'

All argument having thus failed to counteract the pleadings of nature, we were about to set off in a body, when a new actor appeared on the scene. This was a 'gin,' or black woman, from the native camp. Partly by signs, partly by such broken English as she could utter, she gave us to understand that she was

susceptible of the seductive influences of bribery, and that, in consideration of our bestowal upon her of such valuables as we had in our immediate possession, she would surreptitiously deliver Clara into our hands. Accordingly, we mustered rings, watches, knives, tobacco, and all the coin in our pockets, and laid them before her, intimating that upon our reception of the child safe and uninjured, the whole should be her prize. She demanded, in addition, the gilt buttons from my own coat, and a red serge shirt in which the Barber had indured his upper person; and these trifles being conceded, much more to her own satisfaction than that of the owners, the bargain was concluded. One condition, however, she insisted on: none but the father was to be present when she brought the child. She appeared to apprehend some kind of treachery, and by neither persuasion nor intimidation could we induce her to yield this point. Reluctantly, therefore, and not without secret misgivings, I endorsed Courtney's eager promise, that he should be left alone to receive his lost treasure.

By the time this arrangement was concluded, it was near sundown; and the 'gin' left us, after intimating that she would return with Clara when the moon was over a particular tree. She lingered awhile to see that we were actually retreating; and then, by a circuitous route, regained the camp.

We halted at the skirts of the wood. My distrust of the natives rendered me very apprehensive of danger to Courtney. What if it were all a ruse? True, he was well armed; but if his life was sought, he would not be aware of the presence of his enemies until the death-blow had been struck. Yet to return would probably frustrate all his fond hopes, by deterring the wily 'gin' from approaching. How to act in this emergency, I knew not; and I turned to consult with Jim the Barber.

To my surprise, he had disappeared, none knew how or whither. He had lagged somewhat behind in our retrograde march; and it at once occurred to me that he had probably been despatched by the noiseless weapons of the natives.

I now felt assured that treachery was meditated. I looked towards the moon: it appeared to be over the appointed tree. Come what might, I resolved to return; and calling on the constables to follow, I at once turned on our track, and made for the place of rendezvous. At that moment, the sharp crack of a gun reverberated through the woods, and, oh how bitterly I repented my imprudence in consenting to leave Courtney alone!

We hurried onwards yet more rapidly, and in a few seconds, Courtney and the Barber with the rescued child came rushing breathlessly through the scrub. Without a question, or a word of explanation, we joined them, and urged our way to the spot where the horses were picketed. As we mounted, a loud yell—the combined outburst of a hundred savage throats—apprised us that we were pursued; but swiftly as the aborigines of Australia can run, we knew that there was little chance of their overtaking our fleetest steeds. Our black guide shifted for himself, after his own fashion, and the next day appeared safe and sound at Glenferry, to claim the promised reward.

For ourselves, we never halted nor drew rein until we had thoroughly out-distanced the blacks. The next morning we had the satisfaction of placing little Clara in the arms of her desponding mother.

It appeared that Courtney was duly visited by the black 'gin.' She came alone. 'Where is my child?' he asked.

'Piccaninny by-by,' she replied. 'You no gammon?'

Courtney produced the promised treasures, and laid them on the ground. Then she retired awhile; and returned leading the poor child, who, stripped of all her clothing, and terribly frightened, no sooner

recognised her father than she ran towards him with eager delight.

As he strained her to his breast, a stalwart black stepped from the shadow of the trees, and confronted them.

'Bad white fellow kill King Billy's piccaninny,' he exclaimed, for it was indeed himself. 'What for King Billy no kill white fellow?'

The spear quivered in his grasp. Little Clara clung shrieking to her father; so that, ere he could have disengaged himself, he must have fallen a victim to the black man's vengeance; when a musket-ball, aimed by an unseen hand, suddenly changed the position of affairs. King Billy reeled and fell to the earth, mortally wounded, and the spear dropped pointless from his paralysed hand.

Courtney's deliverer was Jim the Barber. Convinced that some foul-play was intended, he had quietly slipped away from our party, and wended his way back to the place of meeting. There he arrived just as the black started from the bush; and it being, as he observed himself, 'no time to stand on ceremony,' he immediately fired the shot which terminated King Billy's career, and saved Tom Courtney's life. I need scarcely say that he was gratefully and adequately rewarded.

The associations connected with Glenferny rendered that locality so distasteful to Courtney, that, shortly after these events, he removed into the interior. Even there, distorted versions of the poisoning at 'No-good' frequently pained his sensitive mind, and he eventually retired to England. In his quiet Devonshire villa he regained a portion of his former tranquillity, and often relates, with a kind of melancholy pleasure, the perilous adventure that befell his handsome Clara in the wild Australian bush.

Many years have elapsed since the date of the events which I have recorded; the white man has planted his foot firmly on the soil of Port Phillip, and the aborigine has receded before him. To the latter, the advance of civilisation has been productive of unmixed evil; European rum and European disease have done their work with frightful certainty and unparalleled celerity. The black population are yearly, nay, daily decreasing in numbers. In lieu of the vigorous savage of former days, a squalid and enfeebled type alone remains. No longer the native camp resounds, as of yore, with the clamour of healthy children; for the fountain of existence has been poisoned at its very source, so that, in all probability, the black man of Port Phillip—the scourge and the dread of the early settler—will be unknown, save by traditions such as these, even to the next generation.

GUNPOWDER.

GUNPOWDER is undoubtedly the most essential aid in war. It is true that we may kill people by means of knives, swords, bayonets, and other weapons, but the cleanest method of destroying our foe is certainly by the aid of gunpowder. In the present uncertain state of affairs, it appears to be considered no longer cowardly or ridiculous to suppose that an attempt may be made to invade England; therefore there may be some of us who will have to burn the composition called gunpowder, and in our country's defence. There may also be others who may pass from this world in consequence of the expanding force of the same composition. It may, therefore, not be generally uninteresting if we offer a few remarks upon gunpowder.

Gunpowder is an explosive propellant composed of saltpetre, sulphur, and charcoal; these three ingredients are mixed in slightly different proportions, according to the practice in different countries. In England, 75 parts of saltpetre, 10 of sulphur, and 15 of charcoal, form the composition; whilst the French

employ 75 parts of saltpetre, 12½ of sulphur, and 12½ of charcoal. Much doubt exists as to the period of the discovery of gunpowder. It is usually believed that a German monk named Schwartz, or the black, was the discoverer; but there is also evidence that our own countryman, Roger Bacon, who lived fifty-six years before Schwartz, was well acquainted with the composition. There is, moreover, in the university of Oxford a treatise, entitled *Liber Ignium*, written by one Marcus Græcus in the ninth century. This book describes a composition of fireworks composed of 2 pounds of charcoal, 1 pound of sulphur, and 6 pounds of saltpetre—a composition which is much stronger than many sorts of gunpowder which are now made.

Saltpetre, or nitre, as it is also called, is a composition of nitric acid with a vegetable alkali. It is never found pure, but is usually contaminated with other salts and earthy matter. It is found in large quantities in India, and is imported into this country in bags, each of which contains about three-quarters of a hundredweight. Before being fitted for gunpowder, the saltpetre requires to be 'refined.' This is usually performed in three separate houses, which are respectively called the boiling-house, the crystallising-house, and the melting-house. The boiling-house is that wherein it undergoes the first process. In this there are a number of copper pans, each of which is filled with pure spring or distilled water and the impure nitre, which is called 'grough nitre'; 10 gallons of water to 1 cwt. of nitre are considered the correct proportions. The bottom of the copper pan is prevented from becoming too hot by a false bottom, and thus the saltpetre does not burn. A man attends two or three pans during the boiling, and skims off all the impurities which rise to the top. After the composition has boiled for about an hour, nearly 100 gallons more water are put into the copper, at the rate of about 1½ gallons per minute: this causes the scum to rise more freely. The composition is then boiled a few hours more, and filtered through filtering-bags and along a trough into crystallising pans, which are placed in the crystallising-house. A cover is next placed over each pan, and the saltpetre adheres in long crystals to the side of the pan. Thirty-six hours are allowed for the crystals to form, after which the water is poured from the pans, and the saltpetre is said to be single refined. The crystals are then reboiled, the composition skimmed, and the crystals allowed to reform as before. About 400 or 500 pounds of these crystals are then put into cast-iron melting-pots, and the saltpetre is melted and brought to a heat of about 800 degrees of Fahrenheit. When it is sufficiently hot to set paper on fire, the fire is allowed to go out, and the nitre is occasionally skimmed with the ladles. When cool, it forms into cakes in each pan, is then broken by mallets, and is ground into powder at the mill.

Sulphur is refined by two processes—namely, by fusion and by sublimation. In the first, the sulphur is broken very small before it is put into a melting-pot. The pot is previously made warm and oiled, and the sulphur is stirred until it melts, which it does at 218 degrees of Fahrenheit. After some time, the fire is raked out, and the sulphur allowed to cool, the surface being occasionally skimmed to take off the impurities which may rise, the greater part of which, however, sink to the bottom. The sulphur when cool forms cakes, which are broken up and remelted. After two meltings, the sulphur is considered fit to be used for gunpowder. The sulphur is 'sublimed' by being put into a cast-iron pot, from which a pipe conveys it when in a state of vapour from the pot to a dome of brick. This dome is made air-tight, and the fire is then lighted under the pot containing the sulphur: when heated, the sulphur

passes off in vapour through the pipe into the dome, which being colder than the pipe, causes the sulphur to fall to the floor in a powder.

Wood is converted into charcoal in what is called a cylinder-house. It is first stripped of its bark, and stacked for some time, so as to become perfectly dry, and is then cut into lengths of about two feet; a number of these are put into a set of cylinders, under which a fire is lighted; in about four or five hours, the wood becomes heated, and the tar and pyroigneous acid are driven off, down pipes left open for the purpose. The charcoal is allowed to cool before it is exposed to the air; it is then withdrawn from the cylinders, and put into the stove.

Having obtained the three ingredients, the next process is to mix them. Thirty-one pounds, eight ounces, of saltpetre; four pounds, three ounces, and three drams, of sulphur; and six pounds, four ounces, thirteen drams of charcoal—making in all forty-two pounds, or a charge, is then transferred by littles at a time to a mixing-machine. This consists of a wooden tub, with a shaft passing through it, to which are attached a number of fliers, in the shape of a knife-blade. The machine is then set in motion, the tub revolving in a contrary direction for about five minutes, when the composition is thoroughly mixed.

The next process is called the amalgamating or incorporating, and is perhaps the most important of any; for upon the correct amalgamation of the various component parts, the strength of the composition greatly depends. It has been found that the proportions of 75 parts nitre, 10 sulphur, and 15 charcoal, give the best explosive compound; but when these three are mixed, and have been worked during several hours under the mill-stones, it would be almost impossible to obtain these exact proportions in every grain, or even in every handful of the gunpowder; we might, for instance, find 80 parts of nitre, 10 sulphur, and 10 charcoal. It is therefore necessary to pay the greatest attention to 'incorporating,' so as to obtain a thorough amalgamation of the various parts.

The buildings in which this operation is carried on are called the 'gunpowder mills.' The machinery works two large stone-wheels, called runners, which are six or seven feet in diameter, from one to two feet thick, and weigh from three to four tons. These runners pass over a circular stone-bed over which the mixed composition is placed; two pieces of wood, called ploughs, pass round the bed, and keep the composition in the track of the stones. In this process, a charge of forty-two pounds is placed under the runners, and about two or three pints of water, more or less, according to the state of the atmosphere, are poured over the charge. This charge is allowed to remain from two to three hours under the stones, when it is called 'mill-cake.' It should then be about three-fourths of an inch thick; and when broken, should be free from specks, and of a dark grayish-black colour. The colour, however, depends upon the charcoal which has been used. If willow charcoal be part of the composition, the colour ought to be an ashen gray; if made with alder charcoal, it ought to be of a brown cast; if made with black dogwood charcoal, the colour ought to be a decided brown. Alder, willow, and dogwood are considered the best for making charcoal which is intended for gunpowder.

In the 'mill,' the greatest amount of practical knowledge is required, for unless the man who attends the mill has a knowledge of how much water to put to the charge, and at what period the powder is fit to be taken from under the stones, it is impossible that the powder can ever be of a superior quality. The great risk of explosion lies in consequence of the stone-runners being separated from the stone-beds only by

the charge of composition, which is merely half an inch thick. If by any chance the composition should become removed, the runners would come in contact with the bed, and a spark be probably produced which would explode the charge. Great care is necessary when selecting the runners and bed to take only such stones as have the smallest quantity of pyrites or flints, as it is from these that the production of sparks is most to be apprehended. It is usually considered that the composition which comes from the mills, and which is now called gunpowder, is in its strongest form. The processes through which it afterwards passes diminish its strength, but increase its lasting qualities.

The next step is called 'pressing.' This is for the purpose of giving additional hardness, which is essential to durability, besides which the powder would suffer a rapid deterioration from the atmosphere, and the friction of transport would separate the three ingredients, in consequence of their different specific gravity, were they not pressed firmly together. The mill-cake is broken down between two sets of metal rollers furnished with teeth, and is then taken to a hydraulic press, which gives a pressure of about 120 tons upon the square foot.

The gunpowder is now ready to be converted into grain, which is done at a building called a corning-house. The process is called 'granulating.' This is performed by means of a machine in which there are three sets of cylindrical teeth-cutting rollers, formed from gun-metal. The teeth of each set are of different sizes, the first, or upper, being the coarsest or furthest apart, and the lower being the smallest. The 'press-cake' is first broken into pieces by means of a wooden mallet, and is passed between the first set of rollers. Here it is crushed into grains of various sizes, and then passed into a spiral reel, the revolutions of which force the grain along. This reel is covered with copper wire of two sizes, part being for the fine grain, and part for the large grain. Such pieces as will not go through the wire are called 'chucks,' and are passed between a second pair of rollers, and again crushed. The various-sized grain is thus obtained.

The dusting and glazing is the next process. When the fine grain is brought from the corning-house, it generally contains about 20 per cent. of dust. To clear it from this, the powder is placed in reels, which are made to revolve about twenty-four times in a minute. About twenty-four pounds at a time are put into the hoppers of the coarse reels, and the reels being slightly inclined to the horizontal, allow the dust to fall through into the reel-case, whilst the grain runs to the lower end. About 300 pounds of fine grain powder are then placed in each of a set of barrels, which are then made to rotate on their axis about thirty-five times in a minute. The grains of powder continue falling over each other, and thus rub off the soft or angular parts, and give to the powder a dark shining appearance. This process is considered to weaken the powder, because the sharp angles permit the grain to ignite more quickly than it would when they become rounded.

It is a curious fact that, during the operation of glazing, the large grain turns to a grayish colour, whilst the fine grain becomes of a deep black colour.

The gunpowder thus far completed is afterwards subjected to various testing operations, which it might be tedious to describe. Though apparently free from moisture, it in reality contains a considerable amount of water, which is driven off by heat. In a warm climate, a simple exposure to the sun would be sufficient, but in our moist atmosphere it is usual to place the powder in a room which is heated by steam-pipes, the powder being exposed in trays. As the best gunpowder is extremely liable to absorb

moisture, it is necessary that the barrels in which it is placed should be well seasoned and as air-tight as possible. The barrels are capable of containing a hundred pounds, but only ninety pounds are put into each barrel, so as to admit the powder to be shaken up occasionally by rolling, and thus prevent its getting lumpy. The barrels are filled at the store-houses, and marked according to the powder they contain. The marks are F. G. and L. G., in red, for powder of the best quality; R. A. for rifle arm; R. S. for restored powder; and F. G. and L. G., in white, for powder of an inferior sort. Gunpowder may often be 'restored' when it is damp, but when it is too far gone, the saltpetre is extracted by boiling and filtering.

The average cost of the ingredients of gunpowder is about L.40 per ton—namely, saltpetre, about L.23 per ton; sulphur, L.6 per ton; charcoal, L.11 per ton.

The only manufactory which the government now possesses is situated at Waltham Abbey, in Essex, which locality is reached by means of the Eastern Counties Railway. The visitor there finds himself amidst scenes of the most peaceful character: meadows, in which the cattle are quietly grazing; streams, along the banks of which Izaak Walton would have found his paradise; and paths twining through woods of willow or alder, the nursery-bed of future stocks of charcoal. Occasionally the appearance of a funeral-looking machine, like a floating-hearse, from which there comes a strong smell of equis, warns the visitor that all is not peace. Then probably across his path will come a man or two whose incrustation leads him to set them down as chimney-sweeps taking their pleasure. Soon the rumbling of machinery-wheels and the splash of water are heard, and a mill is approached. The visitor's feet are now carefully encased in leather shoes, to prevent the chance of any grit or stones being brought into the building, and the mysteries of Gunpowder begin to be explained.

We can readily believe how men who, day by day and week by week, are dealing with this black compound, at length become careless and indifferent, and, consequently, at last meet an untimely end. In worldly matters, and in the usual proceedings of every-day life, we have our warnings; a slight accident may prevent a greater; but here it is perfect safety, or the being blown to atoms. Then, when some downright carelessness has been committed, and each witness has departed in fragments over the neighbouring trees, it is not unusual to call upon some profound philosopher to explain the cause of an accident the effect of which alone is visible. Thus science sometimes prevents the workmen of other manufactories from deriving a useful lesson; for the accident, instead of being proved, as was most probable, to have arisen from a lucifer in the pocket or a spark, is by these learned individuals attributed to some wonderful chemical paradox, of even the elements of which the workmen are totally ignorant.

As an example of the recklessness which is at length felt by those who are in the habit of entering buildings of this description, we will relate the following anecdote, with which we were furnished by an eyewitness.

In the early part of the present century, one of the workmen belonging to the royal gunpowder establishment at Waltham Abbey, on returning from his dinner, was, contrary to orders, smoking a pipe. When he approached a building called the Gloom-store, where the powder was dried, and which was situated on the Horse-mill Island, he put the pipe in his waistcoat pocket without extinguishing the tobacco. Soon after, it was observed by one of the workmen called 'Old Ben Wall,' who was remarkable for his coolness and courage, that the man's pocket was smoking. He

knew that if he called his attention to it, the result might be still more dangerous, as the man was just about to enter the building; he therefore called him on to the platform close to the river, and, with a well-directed push, sent him sprawling into the water, and thus probably saved the lives of many of the men.

In the year 1780, an explosion of a corning-house took place at Faversham, where there are at this day some extensive gunpowder mills. This corning-house was situated on a small island at the foot of a hill, known as Davington Hill. The building was totally destroyed, and six men lost their lives. One, the foreman of the corning-house, named Stubberfield, was blown upwards of 200 yards, and into a stream. The body was not disfigured nor the clothes destroyed. The bodies of the other five were too much mutilated to be recognised. The leg of one was sent by the force of the explosion more than a quarter of a mile, and lodged amongst the branches of an apple-tree, where it was not discovered until some days afterwards. This explosion caused the greatest destruction, not only to the surrounding buildings, but also to two cottages, one of which was situated at the foot of Davington Hill. This cottage was built of lath and plaster; the effect of the explosion forced the lath and plaster from between the timbers in the wall of the house. A poor woman, with her infant child, was in bed in one of the rooms of this cottage, and the front part of the rooms being shaken down, thus shewing the house in section, the woman could be seen from the road by the passers-by. She was, however, unhurt, save by the fright which had been caused to her by the fall of the front of her house. The other cottage, called Walnut-tree House, was partially protected by two large walnut-trees; these acted as traverses, and broke in a measure the shock of the explosion; still, the cottage was so shaken that it was necessary to pull it down. The whole of the houses in the town of Faversham were much damaged, the machinery of the mills situated even at a distance from the explosion being thrown quite 'out of gear.'

After this explosion, the government bought some land called the Marsh, at a greater distance from the town of Faversham. In a few years, another calamity took place at the 'Marsh Works,' in the building where the powder is dried. In this building there were about eighty barrels of powder, when, from some unexplained cause, the whole exploded, and seven men were killed.

In November 1811, there was a very severe explosion at a place called the Lower Island, situated between the town of Waltham Abbey and the site of the Enfield small-arm manufactory. The corning and press houses were both completely destroyed, and eight men were killed. A magazine filled with gunpowder was only a short distance from the corning-house; it was protected by a brick arched roof, and an outer roof of slate, and was protected by a mass of brick-work called a traverse. One of the officers connected with the gunpowder establishment had upon this occasion a very providential escape. He purposed visiting these very buildings, and was on his way towards them, when he was met by one of the foremen, who detained him on business about a quarter of an hour. After leaving him, and when within half a mile or so of the corning-house, he was alarmed by hearing violent shrieks which proceeded from a cottage near at hand. He stopped to ascertain the cause, and found that there was a woman in a fit; after giving some directions to the neighbours, and sending for a medical man, he again started for the corning-house, but had scarcely advanced a dozen paces from the cottage, when even the ground upon which he was standing was shaken by the terrific explosion of the building to which he was advancing,

and in which he would undoubtedly have been, had it not been for his double detention. Hurrying forward, he was the first man at the scene of the disaster, and he soon observed that a much more fatal occurrence would soon take place unless some steps were taken, for upon the roof of a magazine near was a large piece of blazing timber, which had been blown thence by the first explosion. Some thousands of barrels of gunpowder were in the magazine, whilst just across the stream, and ignorant of their danger, upwards of a hundred people had assembled to inquire into the effect of the explosion. Had this powder exploded, scarce one of these people could have escaped. The only person who was capable of affording assistance was a carpenter of the name of Paton, who was requested by the officer to run for a ladder. Together they climbed upon the building, and removed the burning timber, which they threw into the water close by. They then discovered that the door of the magazine had been blown outwards; and this was refixed with all possible dispatch, as the smoking remains of the corner-house were lying about in all directions. Although the officer and man in question merely did their duty, the man was rewarded by the Board of Ordnance with a present of £20.

In explosions of this description it is, of course, very difficult to collect the remains of the men. All that could be found, however, were deposited in eight coffins, and the lids being nailed down, they were, as nearly as could be guessed, said to contain the bodies of the respective men. After the supposed bodies had been interred some weeks, the body of one of the men, less disfigured than that of any of the others, was found in a stream about three miles from the scene of destruction. The body had been blown about fifteen yards into the tail-stream of the mill, and had drifted down to the place where it was found; and this caused many of the relatives much uneasiness, for they began to doubt whether the coffins which they had followed to the grave really did contain the mortal remains of those whom they had loved.

THE BOHEMIANS OF PARIS.

It is generally known that by the name of 'Bohemians' the Parisians designate those numberless poets, artists, sculptors, and journalists, who live in a land bordered on all sides by poverty, and situated under all the latitudes of hope. It is less well known when and how that name originated, and that information we propose to give.

About twenty years ago, seven young fellows, poets, students, and artists, formed a small society. One evening one of them suddenly exclaimed: 'We are the seven capital sins.' This idea was received with applause, and the senior of the band then spoke as follows: 'The moment to form a new sect has arrived, in the temples of which idleness and fantasy shall reign. You have all certainly met on the highways those bands of gipsies who come from the land of the sun, and are called Bohemians. These children of liberty migrate wherever their fancy leads them; they have no care for the morrow; they eat and drink what chance may bring them, and sleep under the first green tree which offers. They are the Bohemians of the highways; let us be the Bohemians of the cities.' This speech was greeted with three rounds of cheers, and on that day the realm of Bohemia was founded.

The seven Bohemians met every evening in a lonely coffee-house, to which they had given the high-sounding name of Rafaller's Club. If they by chance met in society, one asked the other, 'Are you going to the club?' and young French ladies looked with awe upon these elegant gentlemen who certainly risked fifty louis at play.

This club was of a very extraordinary kind, and discussed the most tremendous paradoxes; it was the fatherland of eclecticism, and its list of members could boast a Mohammedan, and even a fakir. Celebrities were not admitted, and if a member had so far forgotten himself as to become distinguished in art, politics, or literature, he was inexorably erased from the golden book. This club took only five seconds to cut up a celebrity, and ten minutes to build up a new social system. Every evening, witticisms, *bon mots*, and *calemours*, the only commodity which was not scarce among them, were lavishly wasted, afterwards collected by play-writers, and generally ascribed by the public to old Talleyrand.

One evening, a solicitor suddenly entered the club, and informed them that one of the seven had inherited forty thousand francs. This communication was received with such a shout of applause as deafened the solicitor. A council was immediately held to determine what should be done with this fabulous sum. One of them proposed that a great public festival should be given to the French people; another, to buy a principality in Arcadia; a third, a journey to Italy. 'Italiam!' exclaimed the seven in a breath, as did once the companions of Æneas; and a week afterwards they were lounging upon the azure sky of Naples, lying in the grass of Ischia and Capri, and sunning themselves on the Posilippo, or lighting their cigars at the glowing stones thrown up from the crater of Vesuvius; and there they lived in a grand style for three months, until one fine morning they awoke without a bajocco left of all the forty thousand francs which were to last for ever. They then bethought themselves of returning to France; but as a band of seven empty stomachs could not well march together without starving out the country through which they passed, they separated, and agreed to meet six weeks later at Rafaller's Club. Then followed the *Odysseys* of seven careless young adventurers. One of them who could not separate himself from the beautiful gulf of Naples, remained at an inn in the neighbourhood, and lived upon the proceeds of his clothes, which he sold to a Jew from day to day. 'Mine host,' who had watched with anxiety the evolutions of this fugitive wardrobe, came one morning to his guest and offered him a hundred francs with which to return to France, and which he should repay him after his arrival in Paris; but the Bohemian was too proud to accept this sum without having honestly gained it. Being somewhat of a painter, he therefore took the portraits of the whole family of the landlord, who afterwards accompanied him on board the ship, where he parted from him with the utmost regret. Such is the charm of youth and genius that even the heart of a Neapolitan innkeeper may be touched by it!

The Bohemians are now no longer confined to Rafaller's Club; there are some who have a position in society and an account at their banker's, but they are nevertheless Bohemians by nature. Such was Balzac, and such is Alexandre Dumas. Balzac was very conscientious in paying his debts, but it is just as true that no man ever had more singular ones than he. A friend once meeting him in the street, invited him to dine with him at a certain restaurant. 'Pray excuse me,' was Balzac's reply; 'I am on bad terms with the landlord, for I owe him eight hundred francs for cutlets.' Sometimes he had very eccentric whims; amongst others, he once took it into his head to have a saloon entirely furnished in white satin, and with an immense chandelier pendent from the ceiling. Two friends who visited him in the evening found him pacing to and fro in the apartment, murmuring: 'Who is to pay for the white satin?' The two gentlemen admired his extravagantly furnished saloon, but wanted the chandelier lighted before they could fully

express their opinion upon the subject. Forty candles were soon burning, and the effect was magnificent; but Balzac went on muttering: 'Who is to pay for the white satin?' At that moment, a knock at the door was heard; it was a publisher, who wished to see Balzac. 'A publisher!' exclaimed Balzac, 'and forty candles burning! He must pay for it. Throw yourselves on the sofas,' he added to his friends, 'and don't be afraid of soiling them with your boots.' The door opened, the publisher entered, and was dazzled by the splendour of the room; however, Balzac continued pacing composedly to and fro, as if quite accustomed to live amid a Babylonian luxury. He then inquired the publisher's business. 'I should like to publish a novel of yours,' stammered he. 'Ah, indeed,' replied Balzac: 'well, I am very much occupied, very fatigued, but'— And then he requested the publisher to return on the following day, in order to arrange the matter. 'I owe Providence at least a pound of wax-candles,' exclaimed Balzac, as soon as the publisher was gone. 'He believes, of course, that I burn forty candles every evening; and it is quite obvious that he cannot offer the same sum to a man who burns such a light, as he would to one who works by a dismal lamp. Let us extinguish the chandelier; my satin is paid for.'

Alexandre Dumas has wasted millions in a few years. In Monte-Cristo, a country-house in the neighbourhood of St Germain, furnished with all possible refinement and luxury, he kept open table for all his friends, and this was sometimes taken advantage of by strangers. One day, M. Alphonse Karr, who has since quitted Bohemia, and become a gardener, on seeing a person at table indulging in a very remarkable manner, inquired his name of Dumas; he replied: 'I don't know him; he is sure to be a friend of my son.' Karr then asked the son, who answered: 'I don't know him; he is sure to be a friend of my father.' Dumas the Elder was very choice in the selection of paper-hangings, and if no longer pleased with the design of one which he had bought perhaps only a week before, he took his pointed cane, bored holes in the paper, and entirely spoiled it. On the following day he selected another, which soon shared the same fate. Some years afterwards, he was very much reduced in circumstances. Once, on the occasion of a society of young fellows, which included Dumas the son, dining at the Maison Dorée in Paris, when the bill for the dinner was handed to them, it was discovered that not one of them had the wherewithal to pay it. Dumas alone had a five-franc piece, and, after some consultation, it was agreed that he should step across the road, and fetch some money from his father. He soon returned with his pockets emptier than before; for he had just lent the five francs to his father, to pay a very pressing demand from his cobbler.

One of the oddest Bohemians who ever lived was a man of the name of Cabannon, who, in this civilised century, played tricks which we would only believe to have happened in the *Arabian Nights*. He lived in a hayloft, but on the Boulevards he always appeared most elegantly dressed. He also possessed the livery of a footman, and when courting a lady, would sometimes say: 'Permit me to send you some flowers by my negro.' He then returned into his hayloft, blackened his face and hands, put on his livery, and carried the promised bouquet to the lady, saying: 'My master, M. Cabannon, has the honour of sending these flowers to madame.' On one occasion, a gallantry of this kind cost him his last five francs. The lady to whom he brought the flowers was so charmed with their beauty that she gave him a louis gratuity. Cabannon was thus compelled to accept fifteen francs for his courtesy.

The Bohemians are often very generous. When Benazet, the celebrated croupier, still reigned at the Palais Royal, a Bohemian once won thirty thousand francs in *trente et quarante*. He might have taken the

money to a banker, but not knowing one, he kept it in his pocket, and while strolling through the garden of the Palais Royal, he met three of his friends, and at once gave them thirteen thousand francs. 'Eh, well,' he said, after they had parted, 'seventeen thousand francs is an odd sum; I had better go back, and gain three thousand more to make twenty thousand.' Shortly afterwards he returned with a much lighter purse than he had entered with, and possessing, in fact, only twenty-four sous, which he had cautiously laid aside for his dinner; nor did he think of going to those friends to whom he had just given thirteen thousand francs, but went quietly to the restaurant where he usually dined for twenty-four sous.

During the reign of Louis-Philippe, there were many political Bohemians who connected themselves with the parliamentary opposition. Amongst them was one so poor that he could never afford to dine; he went to bed at four o'clock A.M., rose at seven P.M., then dressed, and went into society, where he satisfied his hunger with sandwiches and confectionary; but he principally frequented political balls, where cold chicken and ham were to be had. One day he was asked his opinion on M. Odillon-Barrot. The reply was: 'He has no *pâté de foie-gras*.'

The Bohemian is sometimes ferocious. It happened that the wife of one fell ill. The physician declared she could only be saved by having her hair, which was remarkably long and fine, cut off. 'Then I prefer losing her,' answered the Bohemian; and he really lost her.

Everything is not *couleur de rose* in the merry land of Bohemia; woe to him who treads the stony path with nothing but courage for his stick! Too often he will stop short on the road, and hear around him the mocking laughter of others who have been more clever and fortunate than himself. Instead of being pitied, he will be reproached for his pride and temerity. A Bohemian should be young; it is all very well if his watch is at the pawnbroker's when he is twenty; but if he has reached the age of thirty, the same watch must indicate the smiling hour of success, for a gray-haired Bohemian always risks being confounded with a rogue.

LOVE-LETTERS OF THE FIFTEENTH CENTURY.

HAVING occasion, a short time since, to consult that vast collection of manuscript at the British Museum known as the Cottonian Library, it was our good-fortune, whilst turning over the pages of a particularly dusty and dropsical folio, to come across a number of carefully flattened-out letters, written, most of them, with wondrous skill and neatness, in a hand in common use about four hundred years ago, and which, upon a more careful investigation, turned out to be certain original love-letters which had heretofore passed between one John Paston and his 'beloved object' Margery Brouws; interspersed with missives of a more common-place character, written by their parents and near relatives, and referring to the worldly goods necessary to be settled upon each lover respectively, prior to the favourable termination of their courtship.

The letters themselves appear to have been preserved with great care, as the series is complete, with one trifling exception, from the very commencement of the engagement, to a day or two preceding the marriage; and the fact of the ceremony having been solemnised, is rendered indisputable by a certain chirping epistle, written by the bride's father to his brother, giving an account of the marriage-day. We propose to lay before our readers the more interesting of the letters; and shall merely premise that both lovers were descended from good families in the county of Norfolk, and had the misfortune to live at

a distance from one another—the gentleman holding some apparently inferior position at court, while the lady remained at home with her parents. The first letter of the series is from the lady's mother, and is addressed to the intended husband. It is written after a visit to Mr Paston's family, and exhibits the careful mamma evidently anxious to part on very reasonable terms with her disposable daughter :

TO MY WORSHIPFUL COUSIN, JOHN PASTON, BE THIS BILL DELIVERED.

COUSIN—I recommend me unto you, thanking you heartily for the great cheer ye made me, and all my folks, the last time that I was at Norwich, and ye promised me that ye would never break the matter to Margery until such time as ye and I were at a point. But ye have made her such an advocate for you, that I may never have rest night nor day for calling and crying upon to bring the said matter to effect.

And, cousin, upon Friday is St Valentine's Day, and every bird chooseth him a mate; and if it like you to come on Thursday at night, and so purvey you, that ye may abide here till Monday, I trust to God that ye shall so speak to mine husband, and to Margery, that (as I shall pray) we shall bring the matter to a conclusion.

For, cousin, 't is but a simple oak
That's cut down at the first stroke ;'

for ye will be reasonable, I trust to God, which have you ever in His merciful keeping.—By your cousin,

DAME ELIZABETH BREWS,

otherwise shall be called by God's grace.

February 8, 1477.

It is very much to be regretted that we have no account of the mode adopted in 'popping the question.' It is evident from the next letter, written by the young lady herself, that Mr Paston *did* come down to Topcroft on 'Thursday at night,' and in valentine fashion, or by some other old-English and time-honoured method, discovered the bent of his lady-love's affections. We certainly do not know which to admire most in the following effusion, the lady's anxiety to reconcile her admirer to the small property at her disposal, or the elegance of the verses—doubtless original—contained in her letter:

UNTO MY RIGHT WELL-BELOVED VALENTINE, JOHN PASTON, ESQUIRE, BE THIS BILL DELIVERED.

Right reverent and worshipful, and my right well-beloved valentine, I recommend me unto you, full heartily desiring to hear of your welfare, which I beseech Almighty God long for to preserve unto His pleasure and your heart's desire.

And if it please you to hear of my welfare, I am not in good health of body nor of heart, nor shall be till I hear from you; for there knows no creature what pain that I endure, and for to be dead I dare it not discover.

And my lady, my mother, hath laboured the matter to my father full diligently, but she can no more get than ye know of, for the which God knoweth that I am full sorry; but if that ye love me, as I trust verily that ye do, ye will not leave me therefore :

And if ye command me to keep me true wherever I go,

I wis I will do all my might you to love and never no mo;

And if my friends say that I do amiss,
They shall not me let so for to do.

Mine heart me bids evermore to love you,
Truly over all earthly thing;

And if they be never so wroth,

I trust it shall be better in time coming.

No more to you at this time; but the Holy Trinity have you in keeping, and I beseech you that this bill be not seen of none earthly creature save only yourself.

And this letter was indited at Topcroft with full heavy heart, by your own
MARGERY BREWS.
Topcroft, 1477.

How little did poor Miss Margery Brews imagine, whilst penning the latter part of her letter, that, 382 years after it was written, instead of being 'not seen of none earthly creature,' it would form part of a periodical spread over the whole civilised globe for the edification and amusement of a more advanced, but by no means less love-letter writing generation!

In answer to the letter just transcribed is the first communication we have from the gentleman :

TO MY FAIR COUSIN, MARGERY BREWS, THESE.

I pray God and our sweet Lady to keep you in as fair estate of mind and comfort, dear one, as you are in body and humour, which, if they do, ye shall have none ado about care and weariness.

I would be well content to take you alone, sweet mistress, and meddle nothing with bodily cattle [chattels], but ye know well I be but of mean condition, and many are the charges which marriage bringeth, even though ye and I be ready to do our diligence to spare in all large costs, yet there be daily our men and maids, and in time to come, how many imps God only wotteth.

Strive, therefore, sweeting, that ye get from him at least two hundred, or, if ye may, two hundred and fifty pounds. I know he hath it; and methinketh that if I be not worth so much, we may not come together, nay, not at all, and peradventure I shall go away suddenly; but of this more anon, for I purpose to come presently to Topcroft; and if I come and find the matter no more advanced towards me than heretofore, I will not that my lord and lady busy themselves further, but am no son for them.

And so I commend you ever to God and our Lady, and shall ever be your true liege man,

JOHN PASTON.

March 3, 1477.

This cold and 'cavalier' letter is answered by the following delicate effusion :

TO MY RIGHT WELL-BELOVED COUSIN, JOHN PASTON, ESQUIRE, BE THIS LETTER DELIVERED.

Right worshipful and well-beloved valentine, in my most humble wise, I recommend me unto you; and heartily I thank you for the letter which ye sent me by John Bickerton, whereby I understand and know that ye be purposed to come to Topcroft in short time, and without any errand or matter but only to have a conclusion of the matter betwixt my father and you. I would be most glad of any creature alive so that the matter might grow to effect. And whereas ye say, and if ye come and find the matter no more towards you than ye did aforetime, ye would no more put my father and my lady, my mother, to no cost nor business for that cause a good while after, which causeth my heart to be full heavy; and if that ye come, and the matter take to none effect, then should I be much more sorry and full of heaviness.

And as for myself, I have done in the matter that I can or may, as God knoweth, and I let you plainly understand that my father will no more money part withal in that behalf but an hundred pounds and fifty marks,* which is right far from the accomplishment of your desire.

Wherefore, if that ye could be content with that good and my poor person, I would be the merriest maiden on ground; and if ye think not yourself so satisfied, or that ye might have much more good, as I have understood by you before, good, true, and loving valentine, I beseech you that ye take no such labour upon you as to come more for that matter. But let what is be passed, and never more to be spoken

* L.33, Gs. 8d.

of, as I may be your true love and beadwoman* during my life.

No more unto you at this time, but Almighty Jesu preserve you both body and soul.—By your valentine,
MARGERY BREWS.

Topcroft, 1477.

On the same day as that upon which our last is dated, a servant of Sir John Brews thus writes to Mr Paston:

UNTO MY RIGHT WORSHIPFUL MASTER, JOHN PASTON, ESQUIRE, BE THIS BILL DELIVERED.

RIGHT WORSHIPFUL SIR—I recommend me unto you, letting you know, as for the young gentlewoman she oweth you her good heart and love, as I know by the communication that I have had with her for the same.

And, sir, ye know what my master and my lady have proffered with her, 200 marks; and I daresay that her chamber and arrayment shall be worth 100 marks, and I heard my lady say that, and the case required both ye and she should have your board with my lady three years after.

And I understand by my lady that she would that ye should labour the matter to my master, for it should be the better. And I heard my lady say

That it was a feeble oak
That was cut down at the first stroke.

And ye be beholden unto my lady for her good word, for she hath praised you enough.

Sir, like as I promised you, I am your man, and my good-will ye shall have in word and deed.

And Jesu have you in His merciful keeping.—By your man,
THOMAS KELA.

The letter we have already read from Mr Paston to his intended gives us an idea that his character was somewhat cold and mercenary, and this impression is certainly not removed at finding him about this time in the pursuit of another lady, a certain Miss Amry, whom he describes as having 'much estate both in land and other gear,' and for whom he appears for a time to have sacrificed all intentions towards Miss Brews.

Fortunately, however, his new flame was by no means suited to his taste, and in a letter to a friend written shortly after his acquaintance with her, she is described as being 'of low demeanour, and knoweth nothing of comely behaviour; hath large feet, and stinketh in her breath, and is thick, and blurteth out her speech; and,' adds the changeable hero, 'I will have none of her.'

Miss Brews, the 'old original' sweetheart, now comes again upon the field. It is scarcely probable that Mr Paston would, after the receipt of her last letter, have concluded upon marriage with her, had not a certain other circumstance occurred which materially altered the pecuniary relationship existing between the parties. This was none other than a collateral correspondence which had been carried on between the father of the lady and the elder brother of the future bridegroom, which evidently led to certain agreeable proposals on the part of the latter—the nature of which we do not exactly know—upon the making of which a decided change occurs in the general tone of the correspondence between the parties immediately concerned. Thus writes good Mr Paston:

MY OWN SWEET AND FAIR COUSIN—By God's grace all is well settled, and ye have only to say when it pleaseth you to be my loving wife. We may not wait long, for we have long tarried already, and I will that all be well done, and soon; and as for much time, it pleaseth my lady, your mother, that I lodge with

you at home, I have none other charge than to deck myself bravely as is meet, and so come to you.

My mother cometh to Topcroft, by the blessing of God, on Saturday seven-night, and my brother also, besides I know not if there be any other. I may not write long to you, fair one, for I write but badly, Christ knoweth; but I will make amends hereafter, as you may well wot.

And so farewell, cousin, that soon shall be wife.—
From your true and faithful
J. PASTON.

Jan. 7, 1478.

Then follows a letter to his mother:

TO MY RIGHT WORSHIPFUL MOTHER.—Mother, the matter is in a reasonable good way; and I trust, with God's mercy and with your good help, that it shall take effect better to mine advantage than I told you of at Norwich, for I trow that there is not a kinder woman living than I shall have to my mother-in-law, if the matter take, nor yet a kinder father-in-law than I shall have, though heretofore he hath been hard with me.

All the circumstances of the matter which I trust to tell you at your coming to Topcroft could not be written in three leaves of paper, and ye know my lewd head well enough that I may not write long, wherefore I ferry over all things till I may await on you myself. I shall tun into your place a dozen of ale and bread according against Wednesday. And, mother, at the reverence of God beware that ye be so purveyed for that ye take no cold by the way towards Topcroft, for it is the most perilous march that ever was seen. Jesu preserve you.—Your son and humble servant,
J. PASTON.

Topcroft, March 8, 1478.

There is yet one other communication from Miss Brews to her affianced husband, written probably on the very eve of marriage, and exhibiting her in a very favourable light, as we humbly opine. But our readers themselves shall judge:

TO MY OWN GOOD LORD AND TRULY BELOVED VALENTINE, THESE.

MINE OWN DEAR LORD—Ye do well to write kindly to me, and as is your wont, to cheer me to the great change, which, though I much dread—as what maiden would not?—I tell you fairly I long for much also, for in honest sort I know that I shall be doing my duty, and what God willett of me, by tending you, whom I love so extremely, and by making happy him who ever sought mine advantage and honour.

Though we have little estate, we have much affection, and shall ever have, if it please God; and I will always be your true wife in all reasonable service, to do your lawful behests through life, and ye shall find me meek and willing as is fit, and quiet also; and I pray Christ ye shall in some poor way have me to be an advantage to you in matters which be not carnal, the which, if it may be so, God shall be praised meetly and duly by both of us, now here on earth, and afterward in Heaven. Amen.

And, dear Lord, I would have you come here at once, for we all desire you extremely; and spend not your substance in presents and junkets, the which I neither expect nor desire, but I will have you only who shall soon be my husband.—From your true cousin,
MARGERY BREWS.

One more letter will complete our series; it is the one we have alluded to as coming from the bride's father, and mentioning the wedding:

TO MY RIGHT WORTHY AND ENTIRELY BELOVED BROTHER, WILLIAM PASTON, ESQUIRE, BE THESE DELIVERED.

MY RIGHT ENTIRELY BELOVED BROTHER.—Pleaseth it you to hear that your fair niece, Margery, is now married fairly and happily, and hath to husband one of good learning and condition, howbeit he be but in poor estate at this present.

* A religious person who spent his or her time in praying for another.

I would heartily that you, my good brother, had been to help us in her bridal, but that ye could not do. We had as comely youth as any the county could bring, and of fair maids many, such as scarce an old man as I am could look much on without blinking; and we have been for four days wondrous merry, and laughed and played in such wise as I never did in my life before exceeding much. And I would to God that my other brats were well disposed of, so that I might live alone with my dame, and not be cumbered about them, but only to make ready for my end, which must soon come to me.

The andirons ye sent, and the ouches from my sister, pleased us hugely, and I pray Jesu that your cost in that matter may be paid back to you, though how I know not; but ye helped to please us by what ye sent, though ye were not able to be with us; so I heartily thank you. I would that ye were even now with us in our poor house, for I am right merry, and yet drinking as young men used to drink; I pray God it turn not to my hurt.—Your own brother and dear friend,
WILLIAM BREWS.

So end these old letters. The writers have long since mouldered into dust; the missives themselves have slumbered on the shelves of good old Sir Robert Cotton for nearly a century after being collected from some even then ancient muniment-chest, and now form part of our great national collection. The dried leaf, shut up for many a long year between the pages of the herbarium, emits fragrance when exposed to the air, and, as it seems to us, an odour of quaint and old-fashioned affection yet lingers around these ancient and long-forgotten epistles.

HATS OFF!

We protest against the 'monstrous regiment' of Hatters. Their power has increased, is increasing, and ought to be diminished. Britons, countrymen, and brothers, let us no longer bow the head to them, for too long have we perspired under their tyranny.

Tyranny all sensible men will feel it to be, for numb must be the skull which has not suffered from the hat. Nevertheless, we have only to let our oppressors understand distinctly that the abominable things they manufacture at present must be for ever done away with, and they will, for their own sake, speedily find out something new, which will reconcile us to them, and more than reconcile us; something which shall be comfortable, something which shall be becoming, something which shall be worthy to be put upon the head of a man; something, too, which shall be reasonable as regards the price of it, and which may be expected to last a reasonable time, as not being liable to be rendered 'shocking bad,' all at once, by a blow or a shower; something, in short, which we shall willingly doff to the maker of it, in token not of reconciliation only, but of gratitude and esteem. Is there, then, among these hatters any man of original genius and bold conception, any *forte tête*, as the French say? If such there be, now is his time. We venture to predict that a revolution in hats must and will soon be; such a man, by standing forward at the head of it, will be sure to cover himself with glory; will have deserved from his contemporaries a civic wreath; and, dying, will descend to a tomb which will be famous to all posterity, as that of the Capulets. Then, with better right than had Wellington and Blucher—neither of whom were boot-makers—to give their names to casings for our lower extremities, will the name of the great Reformer be for ever associated with the covering he shall have invented for the incomparably nobler head. Unless, therefore, all hatters are as mad as an unmeaning proverb would insinuate that they are, some one

among them will at once brush up his wits, take Time by the forelock, and till he have produced a head-covering *totus et tere*, but not *rotundus*, will allow himself no slothful nap.

No one of ourselves seems willing to strike for emancipation and freedom: we have still to wait for our William Tell who will manfully refuse his homage to the hat. Nay; not only do we thus continue enslaved, but the great majority of us do not feel that they are slaves. What metaphorically is called 'hugging our chains,' is exhibited but too often in the positive admiration with which too many regard their hats; in the tenderness they feel for them; in the pride with which they carry them. They even cumber themselves with that other abominable thing, the umbrella, for the sake of the hat: that which should protect them, they must needs protect. Why not also idolise your boots, and to preserve them from scath and spot, provide yourself with things like inverted umbrellas, to walk abroad in? Nay, why not worship your umbrella itself, and put up a second overhead, to protect the other?

The truth, however, is, that all this reverence for the hat is, like so many other things in our social life, a thing of mere form, and convention, and opinion. I must do as others do, whether I like it or not. It might be my own choice to wear a cocked-hat or a sombrero, a turban or a fool's-cap, but what would my friends say? what would the world say? and, as a climax, what would the street-boys say? The street-boys would run after me, with shouts, in their own horrible way; the world, in its worldly way, would expel me from within it; in his disagreeably friendly way, each dear friend would 'advise me as a friend.' Therefore, in this free country—which is of all European countries, that in which, as regards conventional matters, there is least freedom—I must resign myself, however sorrowfully, to continue for the present the customer of the tyrannical hatter, contrary to my better judgment, and against my will. You will, of course, gather from this that I am a perfect gentleman; knowing, as you do, that if I were not, I should be at liberty to consult my own comfort and my own taste. Were I anything but what I am, I might wear almost anything I chose on my head. You will understand, too, that I am speaking of town-life: in the country, it is happily somewhat different, because there, you know, nobody sees me—except at church; it is of no matter in what frame of mind the inner man may be when I go thither; but were the outer to appear in anything but an orthodox hat, I should be liable to the censure of all the faithful.

Although the respect paid to the hat is thus a mere matter of custom and fashion, hat-reform will not, merely on that account, be the more easily brought about; indeed, institutions of any kind that depend for their existence on custom and fashion only, are generally very tenacious against reform. There being no reason for them other than the woman's one, 'because I choose,' it is useless to assail them with argument. All one can do is to protest against them; and we, having thus protested in the very first words of this article, are not about to enter upon a vain discussion of the question. Our chief object at present is merely to put our protest on record, so that, when the reformation comes, we may receive the honour due to us as having been among the earliest of the reformers.

Of the general history of the hat, we shall say nothing; the curious reader will find plenty about it in the authors who treat of costume. Neither shall we attempt to string together the many instructive anecdotes which are extant about the hat; such, for

instance, as that which tells us how a certain czar of Muscovy once held an audience for the reception of the ambassadors accredited to his barbarous court; how he of the then haughty Venice made his appearance with his hat on, nor thought fit to uncover on arriving in the presence; how the savage on the throne thereupon ordered the hat to be nailed to his head; and how, the order being instantly obeyed—nails and hammer having probably been kept at hand by anticipation—the English ambassador immediately clapped on his hat too, and wore it for a time, but without the nailing being in his case resorted to. Nevertheless, although thus abstaining, generally, from historical references, there are two short stories relating to the hat in France which may be repeated here, as shewing how significant a hat-question has been at times.

'A peasant of Auvergne, speaking to a nobleman, did not remove his hat. The nobleman knocked it off. "If you do not pick it up again," exclaimed the peasant, "the king is coming here soon, and he will cut your head off!" The nobleman was afraid, and picked up the peasant's hat.'

Here we see, symbolised, the people—the *peles*, for there was then no *populus*—relying on the royal power for redress against the aristocracy. But coming down to the convocation of the *Etats-généraux* in 1789, we find things changed a good deal.

'At the sitting of the 5th May, the king having covered himself, and, after him, the *noblesse* having covered themselves, the *Tiers* were about to do the same; but the king, to hinder them from thus assuming equality with the *noblesse*, immediately uncovered himself again.'

Here we see the *peles* in process of transformation into the *populus*; and royalty, unfortunately for itself, siding with the aristocracy against it. The hats referred to in these anecdotes were, of course, not such as our round hats of the present day. But has not the round hat, wretched thing that it is, its significance also? Certainly it has; as we have already hinted, it symbolises our conventionality. But enough of such high philosophy; let us come to the more tangible grievances we protest against. These grievances are of two kinds: the hats inflicted on us are first, we say, uncomfortable; and secondly, they are unbecoming.

It is winter, and you have been out for a couple of hours. How do your ears feel? You endeavoured, on starting, to make up for the deficiencies of the despicable hat by putting on a supplementary neckcloth or shawl, or an upper garment with a high collar; and with how much success? Did you not keep twitching up collar or shawl at every other step, as the arrowy sleet stung you? Were you not more than once obliged fairly to turn your back on the blast; and each time, as you attempted to effect a water-tight alliance between them, did not the high collar, and the hat-brim, so far from uniting to protect you, come into angry collision with each other, and leave, now here and now there, a gap never neglected by the vigilant enemy? We ask you once again, how do your ears feel? Then, whenever you resumed your way, were you not obliged—first, because the vicious hat afforded no protection to your face, and secondly, lest it might go off altogether with the wind—to bend forward at such an angle that you could not see your way, and so kept poking at the visages of unoffending fellow-creatures; not to say that once you came into actual contact with a lamp-post, and were conscious that a grim being was looking fixedly at you, doubtful whether you were not drunk and incapable? You had not your umbrella, of course, for no umbrella could have lived in such a gale; but even had it been otherwise, what do you think of the absurdity of being compelled, simply because your hat is what it is, and not

what it should be, to carry such defensive armour at all? At last, when, bewildered and exhausted, you took refuge in an omnibus, did you not lit up against the roof of it with your sublime crown, and so bring the direful hat down about your ears? Perhaps at the moment, half-frozen as your head was, you felt but little hurt, and thought only of the probable damage done to your hat, wicked author of all the mischief though it was; but as those ears thaw, they will grow nice and hot, and then you will be able, in no small degree, to appreciate a punishment well known in former days, and executed often for much less folly than that you are yourself guilty of in wearing such a thing as the modern hat.

Of spring, we need not speak: in this country, now-a-days, only in fancy doth ethereal mildness come; though assuredly, if it did, that too would bring us grief, because of our hats. We pass on, therefore, to summer. How hot it is, how dreadfully hot, and what a glare from the noontide sun! The wearer of a hat is passing along a treeless road. His eyes are starting from his head, for his head is jammed into an oven. He pulls the hat over his brow, lifting it up behind: it gives him the aspect of a bull about to charge. He perches it now on one side of his head, now on the other, and he reminds you of a magpie. He throws it back again, exposing his whole countenance, and he looks like an ass. At last he can bear it no longer, so, submitting rather to the direct rays of the sun than to the baking process, he takes off his hat, and carries it in his hand, or over his shoulder on his cane. Seeing which, it occurs to one forcibly that he might as well be without such a hat altogether.

Or again, it is autumn, about the equinox. The strong but playful breeze coming suddenly round a corner, tips off your modern hat, and away it goes merrily along the street, in the opposite direction from that in which you were taking it. It goes, and you go; and so, between you, you have the satisfaction of affording much innocent amusement to the lower orders. It goes, and you go; and if its career is not terminated by hoof or wheel, and it is not taken possession of by a truculent-looking bull-dog, whose master, after directing his attention to it, and telling him to 'hold,' has disappeared for a little, why, you pick it up, and put it on again, with the prospect of having to repeat the performance in a few minutes, unless with painful care your hand keeps it to your head; for you know well that if you leave it but for an instant to itself, the sportive thing will be off again and away.

There are other discomforts of the hat to which we might allude; and also not a few inconveniences, such, for instance, as those it involves to the traveller; but it will be enough to indicate them in an indirect way, by stating what, in our opinion, are some of the qualities which the headgear that we so much desiderate should possess. This we shall do very briefly; but let the enterprising hatter who is to inaugurate a new era take heed to these few hints. Though not of gold in themselves, they may, by the alchemy of his practical experience, become words of gold to him. If they do, let him remember us, and shew his gratitude by presenting us cheerfully with as many copies of his improved model as we may require.

First, then, we say, the coming hat ought to be so contrived, that without being tight, it will stick to its place so naturally as not easily to be displaced by every slight accident. Secondly, while it should be impervious to water, it should allow of the air passing through it freely. These two conditions, we may note in passing, are well answered by a modern helmet, first introduced into the Prussian service, in which, at the top, there is a chimney, or ventilator, admitting or

excluding the air at pleasure, and according as it is screwed round in one direction or the other. But a helmet would scarcely answer some of the other conditions we have to propose. For, thirdly, we say that the new hat ought to be light; and fourthly, that it ought not to be, like the present one, a stiff, unyielding thing, of a shape impossible to be altered, however much circumstances may call for an alteration. Fifthly, it ought to afford a shade to the eyes against the sun; and sixthly, it ought, in a certain measure, to protect the neck from rain. Seventhly, it ought not to be easily injured either as to the material or the form of it. And lastly, the look of it, as connected both with the face and the figure, ought to be sufficiently pleasing to the eye.

Perhaps the nearest approach to the thing we long for is found in the true broad and round Scottish bonnet; and our ingenious hatter will do well to keep that in mind when he sets about his task of improvement. It is elastic, it is light; you may roll it up without harming it; it sticks on well when it is wanted to stick; and as it may be pulled about, and depressed or elevated on any side, it may be so trimmed according to the wind and the sun as to offer very good shade or shelter in any direction. Then, the upper part might be made of a waterproof material, and the under, of one through which the required ventilation might be procured. And, finally, as to the look of the thing, you are not to suppose that the comparatively narrow bonnet worn by the peasantry, and usually drawn down by them all round, till it resembles the top of a hay-stack, is the shape which it necessarily assumes; no, if you would form an idea of its capability to assume a graceful shape, you must see it on the head of some one who not merely wears it, but knows how to wear it. In such a case, turned up gallantly on one side, and perhaps with one, two, or three eagle-plumes attached to it with a clasp of cairngorm, it becomes as handsome a thing to put on a man's head as any we know; it is picturesque without being theatrical. These be our hints to hatters.

As to the present hat being unbecoming, probably it is not necessary to say much. Not many, except the hatters, would defend it on the score of its intrinsic beauty. Some, indeed, might speak in its favour, from an association of ideas, it being commonly considered a 'gentlemanly' thing; and how far this feeling is carried among our Irish friends, we need scarcely say. Your true Irishman will rather assert his dignity by wearing a hat with scarce a crown to it, and no brim at all, than condescend to put on a respectable cap. But, on the whole, few, when put to it, would maintain that the hat is becoming. How many of us would have their portrait painted with their hat on? No one, we should think, would horrify a sculptor by proposing to him that he should give a hat to a statue. Apollo would not look well in a hat. Neither do you look well in one. But then, as you say, it is a gentlemanly thing, and that is much; nay, it is a great deal indeed, to all those whom no one would mistake for gentlemen, were it not for the hat question. The sable King George of the Bonny River is of the same opinion; clothed in an old hat, and very little more, he comes on board to ask the honour of having your linen to wash, and flatters himself that, because of the magic hat, he cannot fail to make a favourable impression. And what, again, say you to Old Clo, with three hats on his head? Is he three times as much a gentleman as yourself, or is that carrying the joke too far?

It will doubtless have been understood that all along it has been only of the detestable round hat of these days that we have been writing. Not to speak of still more ancient coverings, we avow that we have some favour for the old cocked-hat, though not for the three-cornered one—that is to say, the fore-and-aft kind

—which, though it has some recommendations, is very ugly. There was some sense in the cocked-hat; the sides, being in their intention, flaps which might be let down according to the weather. Altogether, if nothing original can now be found, it might be well if we returned to that old fashion; to knock the round hat into a cocked-hat would, at all events, be a step in the right direction. But we hope for something still better. As to straw-hats, they are not bad things in summer, except that they are prone to fly away; but they are not at all calculated for winter, and we have much more winter than summer in this country. As to wide-awakes, Jim Crows, and the like, we will have none of them; their very names shew them to be what we may term slang hats. Caps are good; the sailor-cap of blue cloth being much the best. On an old gentleman, however, it has rather too gay a look; and though we have no objections to gay old gentlemen—being, in fact, rather inclined that way ourselves—yet most old gentlemen are not gay, and we must avoid making them ridiculous. Besides, our prejudice in favour of this cap—for, on consideration, we must confess it to be a prejudice—arises very much from associations connected with it; for the sailor-cap, like the open throat and loose handkerchief, is but a fair-weather thing after all. The same, and in even a greater degree, may be said of what is called the Glengarry bonnet; it is becoming enough, but as to protection, it affords no more than a night-cap would.

But we are compelled here and thus to stop, more abruptly than we intended, for we had designed to thunder out such a fulmination on the modern hat as would have abolished it at once. But no matter, it cannot now be thundered; the fact being, that with a view to do the philippic well, and with that vigour which an immediate sense of personal injury alone can give, we put on our hat, and walked forth in this sultry day of August. We have overdone the thing; our eyes goggle, our temples throb, our brain is in a state of semi-congestion; we can no more. And the worst of it is, that we are not sure where we bought that hat, and the ticket with the maker's name on it has disappeared from the lining, so that we do not know on whom to take vengeance.

Only one word more, then. We have abolished hairpowder and pig-tails for the head, things that were merely absurd; why should we retain the present hat, a thing which is not only absurd but hurtful? Very hurtful, surely, that must be which even in the smallest degree affects for evil, not a minor organ or a limb, but 'the dome of thought, the palace of the soul' itself.

THE MONTH:

SCIENCE AND ARTS.

THE noticeable topics of the past month are numerous: masters and men in sundry places have left off trading and working, to talk about a strike; and while both sides are incurring loss, dispassionate onlookers can only lament that knowledge of commercial and social economy, and of human obligation, should even yet be so very imperfect and rudimentary. Perhaps another generation will pass away before masters recognise as a fact that their duty does not end with the payment of wages; and the workmen, that any artisan or artificer has a perfect right to make his own work-bargain, and to work overtime if he likes, and for ninepence a day, or for nothing, should it please him to do so. If working-men would spend less money in the public-house, and put more in the savings-bank, they would never need to join a union or to strike.

Before these lines appear in print, the grandest problem of steam-navigation will, there is little reason

to doubt, be accomplished by the trial-trip and first voyage of the *Great Eastern*. Another question, that of profit, at all events, remains to be solved. Some of our military chiefs think it would be a good thing for government to have four such ships as the *Great Eastern* for the public service. For instance, in sending out the garrison reliefs, usually from 8000 to 9000 men, all might go at once in the large ship: the officers of different corps would have the opportunity of becoming acquainted with one another, and with the different stations, which, under present circumstances, of each relief sailing direct to its destination in a separate vessel, is not possible. A great ship would drop the several companies at their destinations, receive on board those which were to come home, and thus perform a voyage round the world. There might be economy in such an arrangement.

The news that our copper coinage is to be withdrawn, and replaced by a neat and convenient coinage in bronze, gives general satisfaction. The change is to be made with as little delay as possible; and it is easy to foresee that the new coins will be convenient for the pocket, as forty-five of the new pennies will not contain more copper than twenty-six of the old ones. The weight of the copper at present in circulation is 3500 tons, and we are informed that the profit on calling in and recoining that large quantity would amount to L.92,000.

A twelvemonth ago, we drew attention to the Swedish calculating-machine, as invented by Mr Schantz, which was exhibited for a while at the rooms of the Royal Society, and afterwards purchased for the Dudley Observatory, at Albany, state of New York. We have now to mention that a machine on the same principle, constructed by Messrs Donkin, has been purchased for the public service in the office of the Registrar-general, where it will be employed in calculating the numerical tables published by that important functionary.

The Horticultural Society, which has been for some time in a lifeless state, is now starting on a new term of existence, with what appear to be uncommonly bright prospects. They are to have the use of a portion of the land at Kensington for a garden, with proper appliances; and we may hope for a renewal of the operations and experiments in horticulture which proved so interesting in former years, as well as of the exhibitions which attracted so many thousand lovers of flowers to Chiswick. The concessions on the part of government are viewed with so much satisfaction, that already the Society have received L.28,000 in subscriptions towards carrying out their objects. A novel feature in the gardens will be, as we hear, a range of arcades, which are to serve the purpose of a national gallery of sculpture.

The commissioners appointed to inquire into the law of patents recommend a continuance of the present scale of fees, for the reason, that of the 3000 applications now made yearly for provisional protection, more than half are allowed to drop, and that a large number are sought solely with a view to notoriety. Were the fees reduced in amount, the advertising speculators would flood the office with their applications. The surplus this year over expenses will be L.30,000, and in future years L.20,000; and the commissioners are of opinion that the accumulated fund, which is very large, should be expended in the erection of a suitable building for a patent-office, to contain a library, and all the essentials which experience has shewn to be desirable.

The Proceedings of the Royal Dublin Society contain particulars of experiments made by the late Professor Davy, which, in relation to the much-talked of poisoning case, have a special significance. Sulphuric acid is largely manufactured from iron pyrites, which costs about twenty-five shillings a ton, five

or six times less than sulphur. This sulphuric acid is used by the manufacturers of 'superphosphate' and artificial manures. Pyrites, however, contains a considerable quantity of arsenic, which passes into the sulphuric and the manure, and is in turn, as Professor Davy demonstrates, taken up by the plants in fields to which that manure has been applied. Sheep have been known to dislike turnips grown with superphosphate, and to half starve themselves in consequence, when they would eat freely of those grown with ordinary farm-yard manure. The final conclusion from these experiments is, that arsenic may find its way into the body without having been directly administered.

The Royal National Life-boat Institution deserve a passing notice, as much for the active benevolence displayed by the members, as for the improvements they have effected in what may be called the art of saving life. They now number eighty-one completely equipped life-boat stations on the coasts of England, Scotland, and Ireland, where the boats are available at any moment for the rescue of life and property. They were the means of saving 110 persons in 1858, besides affording relief in twenty-nine instances to vessels in distress. The whole number of lives saved by the Institution since its first establishment is 10,902. While, as shewn by the returns of the Board of Trade, the number of wrecks around our coasts is more than 1100 a year, the Institution will have occasion enough for exertion, and merit sympathy. Such a society ought not to be in debt, and we can only trust that its subscribers will multiply until they can carry on their benevolent operations without pecuniary embarrassment.

Further progress has been made in the reclamation of land from the sea on our eastern coast, by an embankment constructed at the Earl of Leicester's cost, at the little port of Wells, in Norfolk. Within two years, the barrier and a breakwater have been built, and the water shut out from seven hundred acres, which ere long will be green with pastures or yellow with grain. It might be worth while to try whether the newly-won lands would not suit for plantations of the Sea Treemallow (*Lavatera arborea*), which by recent experiments is demonstrated to be an excellent material for paper-making. The *Lavatera*, which is well known as a handsome ornament for shrubberies and borders, is a biennial, but will bear cutting the first year. It grows wild on some parts of the coast of England and Scotland, regardless, apparently, of wind and weather, and thriving best in a marine atmosphere. Specimens of what the plant will produce have been laid before the Royal Dublin Society by Mr Robert Plunkett in the shape of cord, rope, thread, lace, paper, and cardboard—all of good quality. The mode of preparation resembles that by which hemp and flax are made ready for the market; and it is stated that the yield of one acre of land is, one ton of fibre, and one of fibrous wood.

A Report, published by authority, On the Colonisation and Settlement of India, gives a good summary of what is known concerning the climate and capabilities of our Eastern empire. Not a few of the points therein contained have been occasionally noticed in this *Journal* within the past ten years; and now that they are put forth in their present form, they will doubtless attract attention. The evidence shews that wherever Europeans settle, an improvement in the neighbourhood is sure to follow. By going to a height of 4000 feet on the mountains, it is possible to live in a European climate: on the other hand, we are told that the statements concerning the effects of the climate even in the hot regions have been much exaggerated. The Bengal planters are described as 'healthy and hardy' as bluff English

farmers. The colonists most in request at present are mechanics and practical agriculturists; and an assurance is given that the great staples, coffee, tea, wheat, and cotton, may be grown in any quantity. It depends on ourselves to cultivate and develop the great trade with Central Asia, or to leave it to be done by the Russians.

Since the great Mutiny, the long-neglected Andamans have been revisited, and are now used as a penal settlement to which the mutinous sepoys are banished. The Home department of the government of India have published a report, with a map and pictorial illustrations, of these islands, from which we learn, that notwithstanding a considerable mortality, the settlement is now established, and as the convicts are kept steadily employed in clearing away the jungle, will become more and more healthy, perhaps better than Singapore. The soil is fertile, and water plentiful. One of the convicts who escaped and fraternised with the natives, was glad after a while to return to the settlement; others had contrived to get across to the coast of Burmah on rafts; some were drowned in the attempt, some committed suicide by drowning; but as it was intended to bring the wives and families of the best behaved convicts to the islands, there would, it was thought, be less discontent among them. Fifty miles east of Great Andaman, a huge rock, nearly a thousand feet high, known as Barren Island, rises from the sea. It is an active volcano, and the surveyors who visited it shew that some of the eruptive phenomena which it exhibits help to explain the phenomena which have puzzled Sir Charles Lyell in his observations on volcanoes. The activity may be judged of from the fact that, when the seamen jumped from the boat on nearing the shore, they sprang suddenly back, for the water was scalding hot.

Our Australian colonies continue to give a good account of themselves. Victoria has planted a million vines, and made last year 3000 gallons of wine, besides selling 32,000 hundredweights of grapes; she has 32 acres of sorgo under cultivation, and 300,000 acres of wheat. To raise wheat in proportion to the number of inhabitants, there should be 750,000 acres; but the deficient supply is made up from South Australia, where, with a population of 110,000, there are nearly 188,000 acres under wheat. While recognising these proofs of prosperity, we must not forget that, as Mr Cobden says, there is plenty to eat on our side of the world, as evidenced by the number of emigrants from the United Kingdom having been but 113,972 in 1858, while in 1857 it was 212,875.

There is an instance of involuntary ornithological emigration to record in the shipment of 300 sparrows for New Zealand, where they are to be let loose to increase and multiply, and to devour the grubs and caterpillars which at present infest the colony and destroy the crops. If the sparrows retain their English pertness and hardihood to the end of the voyage, they will easily naturalise themselves in a country where the English pheasant has already been successfully introduced.

We have now before us the first instalment of a valuable scientific work, newly issued by Messrs Bradbury and Evans, and which it is intended that three others like itself shall follow—*Nature-printed British Sea-weeds*. To the botanist desirous of prosecuting the study of the algæ, this work is of great importance; but it is not less calculated to delight the lover of the beautiful, however destitute of science: nor can we deem it one of the least of its merits, that it presents science in an aspect exceedingly attractive, and is thus calculated to induce youthful minds to enter upon pursuits in every way most profitable and delightful. The varied

forms of animal and vegetable life which force themselves on our attention on the sea-shore, afford a theme of contemplation which can never be exhausted, but which is found always more and more productive of pure and elevating enjoyment. The plates of the volume before us exhibit some of these. They contain most exquisite representations, both in form and colour, of many of the plants whose bright soft hues and multitude of marvellously delicate branchlets we have so often admired in our summer wanderings, when we saw the shrimps gliding among them in the clear rock-pools, and the tentacula of the sea-anemones vying with them in beauty of colour, or gazed far down into the green waters at the furthest extremity of the ledge, where their rosy tints were revealed by the strong sunshine, and the sea-urchin climbed beside them on the perpendicular rock. On opening this volume, one is indeed apt to imagine that the actual plants are there; and it is only on a more careful inspection that we become satisfied that it is not really so, but that they are merely represented by a wonderful process of art. The volume is like a portion of a museum devoted to the illustration of a particular branch of natural history. The process by which the pictures are made is such as to insure their perfect accuracy. The truth of nature cannot have been misrepresented through the mistake of an artist, and the actual reality is before us, just as if we looked upon the original specimen itself. It is not easy to overestimate the advantage likely to result to science from this multiplication of specimens, as it may be termed, from the opportunity thus given to the young botanist to compare species, and, to a certain extent, to examine specimens even of the rarest ones for himself, and in his own abode.

Mr Henry Bradbury introduced the process of nature-printing from Vienna, and has nearly perfected the art in this country. His *Nature-printed Ferns* was the first work he attempted, and we believe, it has met with a reception commensurate with its high merits. The present volume on *Sea-weeds*, though apparently so elaborate in construction, and printed so beautifully, was produced in the surprisingly short time of five weeks! When the entire series of nature-printed subjects is finished, the public will have a set of books unexampled for the beauty and verisimilitude of their contents.

SUSPIRIA.

There is a love in my young breast,
A love that works me woe;
For he loves me not, whom I love best,
So my love I dare not shew.
Ah me! how sweetly shall I rest,
When my love has laid me low!

There is one hope lives in my heart,
A hope to meet again—
To meet thee, never more to part,
Beyond all mortal pain.
Oh! wilt thou love me, when thou art
A spirit free from stain?

There's a prayer I pray in the chapel lone,
It is a prayer for thee!
There's a tear I drop on the marble stone,
That no living eye must see.
Ah me! when I lie in my grave unknown,
Who 'll drop one tear for me?

ETA IOTA.

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